Light Alloy Hydraulic Cylinder with Integrated Path Detection System



Hydraulics combines extremely high forces, resistant drive technology, and secure function with a long lifetime. Therefore it is often used for "heavy mechanical engineering" and displays all its advantages in this field.

The weight of the single components is usually subordinate and very low in comparison to the overall system.

However, this is different for some applications. Especially within the field of mobile, compact machines, the mobility of a system is often very important

In order to meet this request, Hydropneu manufactures light alloy hydraulic cylinders. As a result, the tare weight of the cylinders is crucially lowered. The user is able to handle the whole machine or the module, in which the cylinder is installed, better and can therefore use it in a more secure and comfortable way.

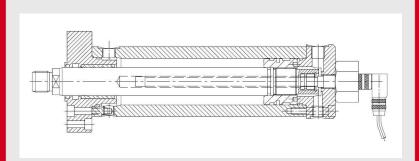
Additionally, light alloys have a high corrosion resistance in environmental conditions, which would affect steel hydraulic cylinders without a thorough, multi-layered lacquer coating. Galvanic coatings can make a surface very responsive and even more corrosion resistant.

Hydropneu constructs light alloy cylinders to perfectly suit your requirements.

Precision in Motion



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- Low tare weight
- ▶ Corrosion resistant
- Piston position has to be detected accurately
- Responsive surface

Example:

We constructed this alloy cylinder for a medical device. Through the cylinder, an isotonic saline is put under pressure and is emitted. Since the process is regulated, a high-resolution path detection system was installed, which transmits the position of the piston at all times. The surface is specifically coated to withstand the medical environment. Because the cylinder was integrated into a mobile module, its weight is very important. The used light alloy ensures an effective mobility. Furthermore, there is no risk of corrosion because it is not supposed to occur within this environment.

Technical Data:

Hydraulic Cylinder: WZ.000.03.2.0-060-036-0190-0002	
Piston-Ø:	60 mm
Piston Rod-Ø	36 mm
Stroke:	190 mm
Operating Pressure:	160 bar
Test Pressure:	200 bar
Operating Mode:	double-acting
End Position Cushioning:	none
Max. Piston Speed:	max. 0,5 m/s
Operating Fluid:	Hydraulic Oil HLP 46
Special Features:	all components of the cylinder housing and piston are made of aluminium alloy integrated high-resolution path detection system

